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**CLAIMS:**

What is claimed is:

1. An apparatus for processing waste, the apparatus comprising:  
  
a waste input container having an input opening in a top thereof and an output opening in a bottom thereof;  
  
an input door operative to close and substantially seal the input opening;  
  
an output door operative to close and substantially seal the output opening;  
  
a shredder mounted under the output opening and operative to shred waste to a desired maximum size;  
  
a processing chamber located under the shredder such that, when the output door is open, waste deposited in the waste input container passes through the output opening and through the shredder, and shredded waste drops into the processing chamber;

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a sealable discharge opening in the processing chamber;

an ozone gas source connected to the processing chamber and operative to direct ozone gas into the processing chamber;

an ozone indicator operative to indicate a concentration of ozone gas present in an atmosphere inside the processing chamber;

a chamber exhaust selectively operative to exhaust the atmosphere from the processing chamber; and

a hopper exhaust selectively operative to exhaust the atmosphere from the waste input container.

2. The apparatus of Claim 1 further comprising a disposal container having a filling opening releasably attached and substantially sealed to the discharge opening, and means to move shredded waste from the processing chamber through the discharge opening into the disposal container.

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3. The apparatus of Claim 2 wherein the means to move shredded waste from the processing chamber through the discharge opening into the disposal container comprises a substantially upright wall located in the processing chamber opposite the discharge opening, and an actuator operative to move the wall toward the discharge opening and push the shredded waste through the discharge opening.
4. The apparatus of any one of Claims 2 and 3 further comprising a chamber discharge door operative to close and substantially seal the discharge opening in the processing chamber.
5. The apparatus of any one of Claims 1 - 4 further comprising an agitator in the processing chamber operative to lift shredded waste contained therein and drop same through the atmosphere inside the processing chamber.
6. The apparatus of any one of Claims 1 - 5 further comprising a screen under the shredder, and wherein the screen prevents shredded material larger than a desired size from dropping into the processing chamber.

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7. The apparatus of any one of Claims 1 - 4 further comprising a pusher mechanism in the waste input container operative when activated to exert a force on waste in the waste input container toward the input opening, and operative to force the waste into the shredder..
8. The apparatus of any one of Claims 1 - 7 wherein the exhaust comprises at least one of a vent connected to an exterior atmosphere and a filter.
9. The apparatus of any one of Claims 1 - 8 further comprising a water source connected to the processing chamber and operative to direct water into the processing chamber.
10. The apparatus of Claim 9 wherein the water source comprises a steam source.
11. The apparatus of any one of Claims 1 - 10 further comprising a waste cart elevator operative to raise a waste cart from substantially floor level adjacent to

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the apparatus and invert the waste cart to empty waste contained in the waste cart into the waste input container.

12. The apparatus of Claim 11 wherein the waste cart elevator is linked to the input door of the waste container such that opening the input door operates the waste cart elevator to empty waste into the waste input container, and such that closing the input door returns the waste cart to substantially floor level.

13. A method for processing biomedical waste, the method comprising:

providing a shredder above a substantially sealed processing chamber;

maintaining a selected concentration of ozone in an ozone rich atmosphere inside the processing chamber during shredding at a level sufficient to sterilize the biomedical waste;

feeding waste into the shredder and operating the shredder to shred the waste to a desired maximum size, and allowing shredded waste to fall through the ozone rich atmosphere inside the processing chamber and keeping the waste in the

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processing chamber for a length of time sufficient to sterilize the biomedical waste at the selected concentration of ozone;

exhausting the ozone rich atmosphere from the processing chamber and removing sterilized waste.

14. The method of Claim 13 further comprising, prior to exhausting the ozone rich atmosphere, periodically moving waste from the processing chamber through a discharge opening in the processing chamber into a disposal container sealed to the discharge opening, and shredding more waste into the processing chamber as waste is moved into the disposal container until the disposal container is full.
15. The method of any one of Claims 13 and 14 wherein feeding waste into the shredder comprises feeding an un-segregated waste comprising biomedical waste and general waste.
16. The method of any one of Claims 13 - 15 further comprising increasing a level of moisture in the processing chamber.

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17. A method of treatment of biomedical waste, said method comprising:
- a. Shredding biomedical waste to be treated;
  - b. Depositing the shredded waste within a processing chamber containing an ozone-enriched environment, wherein during the deposit of the shredded waste into the processing chamber the shredded waste is exposed to and mixed with the ozone contained within the processing chamber;
  - c. Maintaining the exposure of the shredded waste to the ozone-enriched environment in the processing chamber for a sufficient period of time to sterilize the shredded biomedical waste; and
  - d. Upon sterilization of the shredded biomedical waste, removing the shredded biomedical waste now being treated waste from the processing chamber for further conventional packaging or disposal.